

Influence of socio-demographic issues in body mass index (BMI) of drug addicts in methadone maintenance treatment

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Introduction

To study the interaction between dietary habits and nutritional status of drug addicts in methadone maintenance treatment appears to be an important field of research in Dietetics as the drug addicts are a risk group for undernutrition, and little is known about diet and nutrition in this population (1).

Studies report that this group presents nutritional deficiencies, including low body weight, and even drug-induced anorexia and changes in dietary patterns (2,3,4). The most plausible explanation for these nutritional deficits is an insufficient diet. However, studies related to dietary intake of drug abusers have failed to present evidence that insufficient intake is responsible for these deficits (1,4). Although the drug does not directly affect energy intake, may affect the frequency and nutritional quality of meals. Drug use itself affects the nutritional status for several reasons (1).

The socio-demographic conditions must be taken into consideration in the process of intervention with this population, as the studies reporting that BMI is directly related to socio demographic status (5).

The aim of this research was to study anthropometric, nutritional and socio-demographic characteristics in drug addicts in methadone maintenance treatment.

Methodology

•**60 drug addicts in methadone maintenance treatment** (85% Male ; 15% Female) in the Center for Integrated Responses (CRI) of Braganza, Northeast of Portugal.

•**Anthropometric assessment:** measurement of body weight with the analyzer Tanita BC-418 ®, and a height stadiometer.

•**The socio-demographic and dietary** data were collected through a questionnaire devised for this purpose, and previously tested.

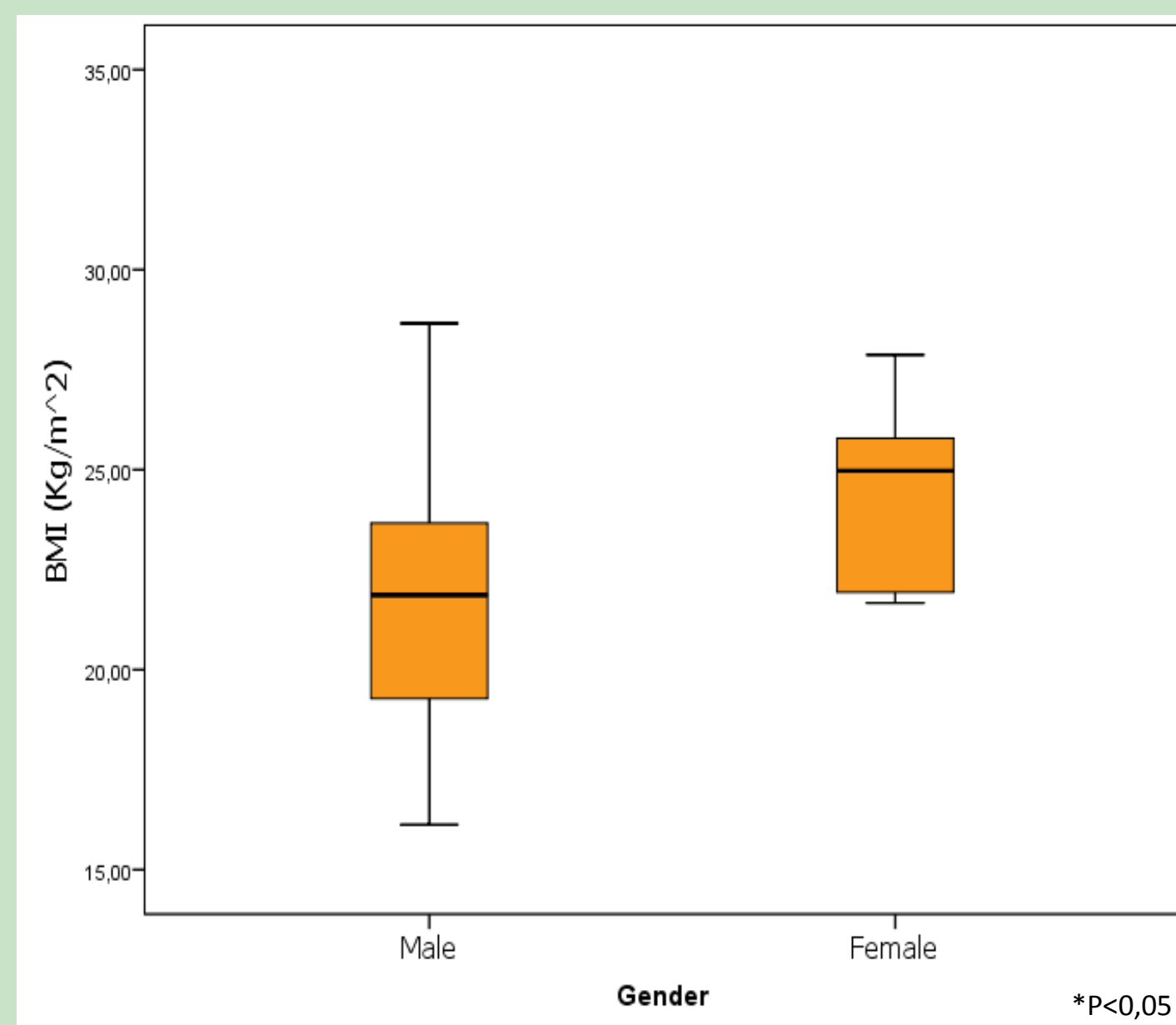
•**Age:** 35,58 ± 7,95 years (Male 35,67± 7,95 years Female 35,11 ± 8,43 years).

•**Statistical analysis** : SPSS 20.0 for Windows (Statistical significance was considered for p values <0.05)

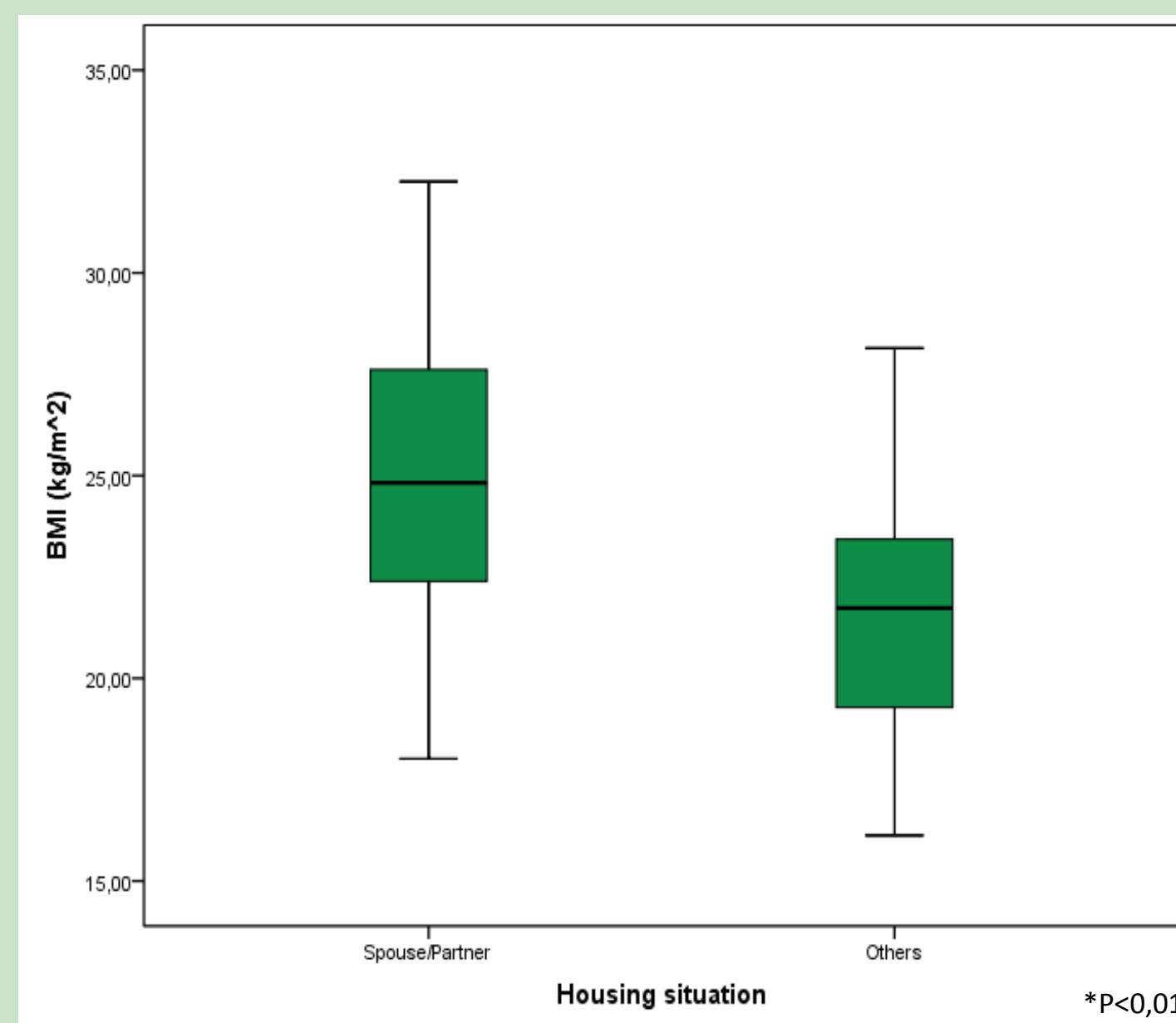
•Were performed descriptive statistics (means, standard deviations) and relations between variables using nonparametric statistics Mann-Whitney test.

Table 1 - Characterization of drug addicts study participants

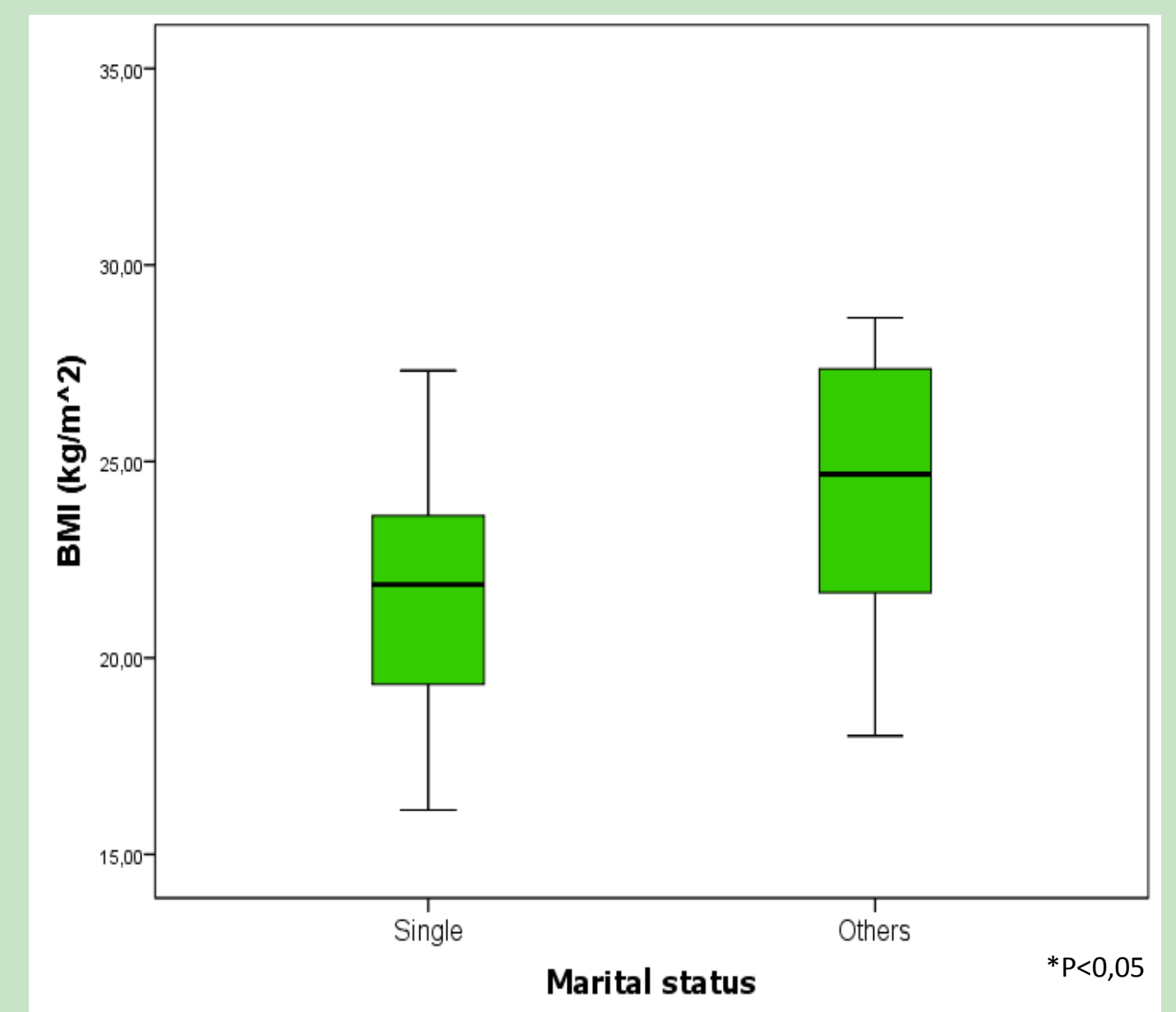
	Drug Addicts (n=60)
Gender (%)	
Male	85%
Female	15%
Age (years ± sd)	35,58 ± 7,95
BMI (Kg/m² ± sd)	22,46 ± 3,36
Underweight (%)	13,3%
Normal weight (%)	65,0%
Overweight/Obesity (%)	21,7%
Housing situation (%)	
Alone	31,7%
Spouse/Partner	26,7%
Parents	33,3%
Other	8,3%
Marital status (%)	
Single	71,7%
Married/Unmarried	15,0%
Divorced/Separate	11,7%
Widower	1,6%
Duration of methadone treatment (years ± sd)	4,10±4,47
Meals per day (%)	
≤3	78,3%
>3	21,7%



Graph 1 - Relationship between BMI and Gender*



Graph 2 - Relationship between BMI and Housing situation*



Graph 3 - Relationship between BMI and Marital status*

Discussion/Conclusion

This study suggests that there is a relationship between nutritional status and food consumption profile of drugs addicts in methadone maintenance treatment with socio-demographic issues such as housing situation and marital status. As observed in a longitudinal study BMI was significantly higher in females (6).

BMI was significantly higher in drug addicts who live with a spouse compared to other housing situations and lower in addicts with being single. These results can be attributed to the presence of a figure who infuses homemade fractionated habits and prepare meals. The presence of another person seems to be a factor influencing the nutritional status, not only because the addict have someone who prepares meals, but also because being together helps them feel motivated to eat.

The socio-demographic conditions must be taken into consideration in the process of intervention with this population.

More studies must be performed in other to clarify other food behavior variables in drug users populations.

References

- 1.Forrester JE. Nutritional Alterations in Drug Abusers With and Without HIV. American Journal of Infectious Diseases. 2006; 2(3):180-3.
2. Saeland M, *et al.* Living as a drug addict in Oslo, Norway – a study focusing on nutrition and health. *Public Health Nutr.* 2009;12(5):630-6.
3. Islam SKN, *et al.* Nutritional status of drug addicts undergoing detoxification: prevalence of malnutrition and influence of illicit drugs and lifestyle. *British Journal of Nutrition* 2002;88 (5)507-13.
4. Forrester JE, *et al.* Dietary intake and body mass index in HIV-positive and HIV-negative drug abusers of Hispanic ethnicity. *Public Health Nutr.* 2004; 7(7):863-70.
5. Iqbal Z. Demographic Distribution of Drugs Dependence and Health A Wareness in Pakistan. *RMJ* 2008; 33(2):211-13.
6. Kolarzyk E, *et al.* Nutritional Status of the opiate dependente persons after 4 years of methadone maintenance treatment. [PubMed – indexed for medline] 2005;62(6):373-7.